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#### ABSTRACT

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This paper describes magnet schools as thematic islands of choice within a traditional district-assignment plan. These "islands of choice" are currently the most popular destination with those who exercise some choice in where they send their children to school. During the 1991-92 school year, 3,200 magnet schools were in operation, hosting some 1.2 million students. Started in the early 1970s, magnet schools have shown to be effective in reducing racial isolation and in providing high-quality educational programs. There are different types of magnet programs and different instructional results. A study of teacher self-reports found that whole-school magnets featured higher levels of internal and external community when compared with program-within-school magnets. A comparison of graduates of comprehensive urban high schools with magnet-school graduates showed that the latter demonstrated equal or better social development and educational/occupational aspirations, and they frequently outperformed their conventional high-school peers in math, reading, science, and social studies. Even with these positive reports, there are some problems with magnet schools. One study showed that when student ability is considered in the evaluation design, magnet students perform at lower levels than do their nonmagnet counterparts. Access to magnet schools can also be difficult for Latino and African-American students. (Contains 23 references.) (RJM)

## **Trends and Issues Magnet Schools**

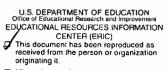
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### **Magnet Schools**

#### By Margaret Hadderman

A type of intradistrict plan, magnet schools are thematic islands of choice within a traditional district-assignment or controlled-choice plan. Each magnet school subscribes to a particular educational philosophy or curricular specialty, drawing students who share that interest. Operating in an open-enrollment context, magnet schools have been used to desegregate urban schools in the North. Magnets emerged first in Milwaukee and Cincinnati during the 1970s, spreading to both northern and southern cities in subsequent decades (Elmore and Fuller 1996).

Currently, magnets are the most prevalent instrument of choice. During 1991-92, districts across the country operated 2,400 magnet schools and 3,200 individual magnet programs. At that time, 1.2 million students participated in magnet programs, boosted by over \$739 million in implementation support (Steel and Levine 1994). As of 1996, more than 1.5 million youngsters attended magnet schools and over 120,000 were on waiting lists (Black 1996).

Although the primary focus of magnet schools may be shifting from "desegregating schools to creating schools with high interest, motivation, and learning for students and with support and satisfaction for parents," their survival depends on serving diverse student populations effectively (Black 1996).

The following sections summarize research findings that point to positive effects of magnet schools. A subsequent section looks at less favorable findings.

#### **Services to Minority and Disadvantaged Students**

Several studies document magnet schools' effectiveness in reducing racial isolation and providing high-quality educational programs (Black 1996). A 1994 study of eleven magnet school campuses in Federal Region F (including Arkansas, Louisiana, New Mexico, Oklahoma, and Texas) suggested that magnet schools represent a viable alternative for creating schools that benefit all students, regardless of race, sex, or national origin (Scott and DeLuna 1994). The study recommended that nonmagnet schools adopt the promising practices of these "pockets of excellence" to meet students' twenty-first-century educational needs.

The same conclusion was reached in a more recent report by the Citizens' Commission on Civil Rights (1997), which studied districts in three communities (St. Louis, Cincinnati, and Nashville) that made wide use of magnets and a special interdistrict city-to-suburb transfer program. This study found that magnet schools (and the transfer program) encouraged desegregation and met the test of serving poor children more effectively than the schools they previously attended, and therefore should be greatly expanded.

In another study that tracked 4,000 urban students from eighth through tenth grade, Adam Gamoran (1996) concluded that students attending magnet schools learn more than those enrolled in comprehensive high schools and in Catholic and secular private schools. According to Gamoran, students at magnet schools "made the greatest gains in reading, social studies, and science." Students in comprehensive high schools had the lowest scores in these three subjects and math.

#### **School Community and Parental Satisfaction**

A study of teacher self-reports comparing indicators of school community in three whole-school dedicated magnets and four program-within-school magnets (with only partial student participation) in the Nashville Public Schools found that whole-school magnets were characterized by higher levels of internal and external community (Hausman and Goldring, March 2000).

The same researchers investigated relationships between urban parents' reasons for choosing magnet schools and their degree of satisfaction, involvement, and influence in the schools (June 2000). Parents selected schools for numerous reasons, and they seemed highly satisfied with their choices; those choosing for value reasons were most likely to be involved and satisfied with their children's schools.

#### **Successful Career Magnet Programs**

Three student surveys, including two studies that compared graduates of magnet programs with graduates of comprehensive, urban high schools, suggests that magnets can positively influence high school graduates' social development and educational/occupational aspirations. Two long-term studies also confirm the academies' suitability for high-risk and other youth.

In a study that interviewed 20-year-old graduates of 110 career-magnet programs, these graduates were found to smoke and drink less, study more, and take their lives more seriously than do graduates of comprehensive high schools (Crain and others 1999). The former were also more likely to say parents would support them for college, believe they would be pursuing their chosen career within the next 6-10 years, and have friends with career interests. Career magnets created a climate to help young people acquire the social capital (and adult influences) needed for career development (Flaxman and others 1997).

Similarly, a survey of 336 graduates of a large urban high school showed that graduates from magnet programs had significantly higher educational aspirations than did nonmagnet program graduates (Bank and Spencer 1997). Results suggest that magnets' positive effects on educational outcomes may be indirect ones, due to increases in self-esteem resulting from being a "special student in a special school." Bank and Spencer expect achievement to increase in the years following graduation.

A survey of juniors and seniors attending California's innovative New Technology High School (funded partly by business partnerships) was overwhelmingly positive (Van Buren 2000). Students were favorably impressed by the school's high-tech, business-friendly ambience and believed strongly that their learning experiences would position them advantageously for college and career success.

Charles Dayton, a researcher who evaluated California's first 10 career academies and is now coordinator of the Career Academy Support Network, is impressed with academies' progress over the past two decades (Gehring 2000). The state now has "240 career academies financed by state grants and about the same number that operate

without state support." Altogether these academies serve 20,000 students, and Governor Gray Davis has proposed funding for 50 more academies.

The Manpower Demonstration Corporation's study of nine career academies around the nation that serve predominantly high-risk, Hispanic, and African-American students revealed modest, but encouraging findings (Gehring 2000). Career-academy attendees did not necessarily improve test scores, but did improve attendance and were more likely to stay in school and graduate on time than students enrolled in comprehensive high schools.

According to three experts (Porter and others 2001), career academies are gaining in popularity "because they prepare high-school students for both college and the workplace." Students are "organized into small learning communities that infuse career themes into college preparatory curricula." At the same time, "partnerships with employers, local colleges and community organizations ensure that students have a wide range of work-based learning experiences."

To make learning more meaningful, Porter and associates say the school-academy experience must be fortified by two kinds of credentials: academic foundation certificates and an "industry-recognized skill certificate" leading to "a good entry-level position in a technical field." Many existing tech-prep, career-academy, and career-oriented programs (magnet and otherwise) could be adapted to fit this new high-school credentialing system.

#### **Student Achievement**

Several studies examining student outcomes in magnet schools are encouraging. Adam Gamoran's study (1996) of 24,000 students (see below), based on a subset of 48 magnet and 213 conventional high schools in the 1988 National Educational Longitudinal Survey, found that magnet-school students "significantly outperformed their peers attending non-magnets in social studies, science, and reading," despite schools' organizational similarities.

Two studies summarized in the Policy Analysis for California Education (PACE) report (Fuller 1999) posted similar results. In St. Louis, students in magnets outperformed neighborhood-school students in math, reading, science, and social studies. In a San Antonio study of students in multilingual magnets, students denied admission due to space limits, and students in neighborhood schools, magnet students scored significantly higher on math and reading assessment than did the other groups of students.

A spring 1998 study of magnets at Duval County (Florida) Public Schools (Poppell and Hague 2001) found that fewer than half of the district's 78 magnet programs satisfied minimal desegregation goals or could boast above-average parent/community involvement. However, magnet-school students' academic achievement exceeded that of nonmagnet school students at all levels.

#### **Less Favorable Findings**

Some other studies have documented negative or mixed results for magnet schools. For example, Steel and Eaton's 1996 evaluation of the Magnet Schools Assistance Program between 1989 and 1991 discovered that only half the schools met their desegregation objectives during the grant period.

A study examining the value-added effects of magnet programs in Prince George's County, Maryland, schools (Adcock and Phillips 2000) showed that "overall, elementary students in magnet programs perform better than nonmagnet students," largely due to self-selection of more able students for magnet programs. However, when student ability is considered in the evaluation design, magnet students perform at lower levels than do their nonmagnet counterparts. Also, talented and gifted (TAG) students in magnet programs performed worse than TAG students in regular schools.

An ACORN (Association of Community Organizations for Reform Now) investigation (1997) of eighty-six middle schools in fourteen New York City districts attributed racial imbalances at two premier academic high schools to "programmatic and geographical tracking" that condemns certain students to failing, zoned high schools. Evidence shows that only a few middle-school students have the opportunity to master the material needed to perform well on entrance examinations, and that race is a major factor.

A study that analyzed changes in enrollment patterns and access to Chicago magnet schools (Allensworth and Rosenkranz 2000) found similar geographical tracking/residential zoning effects. Researchers concluded that "students in the wealthiest sections of the city have access to many more magnet schools that other families" and that access is least available to students living in Latino and low-income African-American neighborhoods on Chicago's South Side. Black students, on average, must travel further "than other students to attend the highest achieving schools in the city." Additionally, many of the 32 elementary magnet schools examined do not meet Chicago Public Schools' desegregation consent-decree goals.

Another study uncovered substantial social and racial isolation in four elementary and middle-level magnet schools in a large urban district in the Southeast (Yon and others 1998). Parents of low socioeconomic status could not participate as often as middle-class parents, due to commuting problems and inflexible work schedules. Student isolation patterns were typical of those found in traditional schools, though efforts to mix kids of different racial backgrounds in classrooms were fairly successful. Some teachers and parents regarded magnet schools as either elitist or intentionally rigorous; few mentioned racial integration as magnets' overarching purpose.

Although Claire Smrekar and Ellen Goldring (1999) found favorable racial desegregation results in Cincinnati and St. Louis magnet schools, they say both systems reflect a "creaming" of more socioeconomically advantaged parents and their children from neighborhood to magnet schools. For these researchers, differences in family income, education levels, and employment status are troubling and should spur efforts to expand low-income parents' participation in the school-choice environment. Also, successful desegregation policies have inadvertently furthered the erosion of community bonding--the social ties and institutions binding families around neighborhood schools.

Smrekar and Goldring's (1999) findings support Hausman's observations: magnets' differences from nonmagnets have less to do with the "unique" curricula promoted in district brochures than with provision of adequate resources and a safe, orderly learning climate. An earlier study by Adam Gamoran (1996), which analyzed National Educational Longitudinal Survey data from 24,000 students, found no significant differences in academic climate between magnet and regular schools.

Finally, Kimberly West (1994), a legal critic, calls magnet schools a "desegregation tool that backfired." According to West, "many magnet schools are rife with racially segregated classes," even when the schools themselves are racially balanced. Minority students are too often herded into remedial and low tracks and "treated as inferior by the very system that was designed to help them." According to West, white magnet students reap most of the schools' benefits and resources.

#### A Call for Research Balance

Inspired by Rolf K. Blank's work on evaluating magnet schools, Cordelia Douzenis (1994) urges that researchers look beyond students' achievement scores. An "ideal" evaluation of magnet schools would include achievement and other outcomes of magnet and nonmagnet students; an examination of how a magnet school's leadership, staffing, policies, and curriculum influence outcomes; and an indepth study of factors such as policies and access that affect the entire district.

Studies of magnet schools' performance vary as to consideration of contributing factors such as "family structure or parental income which likely influence the decision to choose magnet schools" (Fuller and others 1999). Government and other school-choice evaluative studies must be careful to address this social-selection effect.

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